

# PROBLEMAS SESIÓN 3: 2.9, 2.10, 2.14

2.9)

a)

$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	a	+0
				b[0]	+4
				b[1]	
				b[2]	
				b[3]	
				b[4]	
				b[5]	
				b[6]	
				b[7]	
				b[8]	
				b[9]	+44

b)  $@s[i].b[j] = @s + 44i + 4 + 4j$

c) `imul $44, %esi, %eax` #44i  
`addl %ebx, %eax` #44i + @s  
`movl 4(%eax, %edi, 4), %ebx` #todo sumado  
`imul $44, %ebx, %eax`  
`movb (%ebx, %eax) /dl` #x=...

2.10)

a)

i	-12	
suma	-8	
fila	-4	
%ebp		← %ebp
@ret	+8	
@l1	+12	
m	+16	
n	+20	

b) calcula:

```
pushl %ebp
movl %esp, %ebp
subl $12, %esp
movl $0, -8(%ebp) # suma=0
movl $0, -4(%ebp) # fila=0
pushl %ebx
```

for:

```
movl 12(%ebp), %ebx # i=m
cmpl 16(%ebp), %ebx # i < n
jge fi_for
leal -4(%ebp), %ecx # &fila
movl $8(%ebp), %edx # @l1
imul $40, -4(%ebp), %esi # 40*fila
addl %esi, %edx # edx = +
movl (%edx, %ebx, 4), %eax
pushl %ecx
pushl %eax
call Normaliza
addl $8, %esp
addl %eax, -8(%ebp)
incl %ebx
jump for
fi_for:
movl -8(%ebp), %eax
incl %eax
popl %ebx
movl %ebp, %esp
popl %ebp
ret
```

fi\_for:



2.14)

a)

d[0]	-404
...	
d[99]	-4
aux	-ebp
ebp	
@ct	+8
a	+12
@b	+16
c	+20

b). `leal -4(./ebp), ./eax`  
`pushl ./eax`  
`leal -404(./ebp), ./ebx`  
`pushl ./ebx`  
`pushl $0`  
`call examen.`

c) `movl $0, ./eax`  
`for: cmpl $100, ./eax`  
`jge fi-for`  
`leal -404(./ebp), ./ebx #@d`  
`movl (./ebx, ./eax, 4), ./ecx #d[aux]`  
`movl 12(./ebp), ./edx`  
`movl ./ecx, (./edx, ./eax, 4) #b[aux]=d[aux]`  
`incl ./eax`  
`jump for`  
`fi-for:`

d). `pushl 16(./ebp)`  
`pushl 12(./ebp)`  
`pushl 8(./ebp)`  
`call examen.`